

## UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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| APPLICATION NO.    | FILING DATE                              | FIRST NAMED INVENTOR  |   | TA           | ATTORNEY DOCKET NO. |  |
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|                    |  |   |   | DATE MAILED: | 03713701            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

|   | Application No.  | Applicant(s)  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|
| Office Action Summary   | 09/621,464   | GREEN ET AL.  |  |  |  |  |  |
| Onice Action Summary  | Examiner   | Art Unit  |  |  |  |  |  |
|   | Nguyen T Vo  | 2682  |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address   |  |   |  |  |  |  |  |
| Period for Reply  |  |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.   |  |   |  |  |  |  |  |
| <ul> <li>Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this community.</li> <li>If the period for reply specified above is less than thirty (30) day be considered timely.</li> </ul> | nication.<br>ays, a reply within the statutory minimum | of thirty (30) days will                                  |  |  |  |  |  |
| <ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> </ul>  |  |   |  |  |  |  |  |
| - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Status   |  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on  |  |   |  |  |  |  |  |
| ·— · · _ —  | his action is non-final.                               |   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |   |  |  |  |  |  |
| closed in accordance with the practice under  |  |   |  |  |  |  |  |
| Disposition of Claims   |  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>22-32</u> is/are pending in the application.  |  |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>22-32</u> is/are rejected.  |  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |   |  |  |  |  |  |
| 8) Claims are subject to restriction and/or election requirement.   |  |   |  |  |  |  |  |
| Application Papers  |  |   |  |  |  |  |  |
| 9)⊠ The specification is objected to by the Examir  | ner.   |   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are objected to by the Examiner.   |  |   |  |  |  |  |  |
| 11)⊠ The proposed drawing correction filed on <u>21 July 2000</u> is: a)⊠ approved b)□ disapproved.   |  |   |  |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |  |   |  |  |  |  |  |
| D 1: 21   |  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |   |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:   |  |   |  |  |  |  |  |
| 1. received.  | FIED copies of the phonty docum                        | ients nave been.  |  |  |  |  |  |
| 2. received in Application No. (Series Code / Serial Number)  |  |   |  |  |  |  |  |
| 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |   |  |  |  |  |  |
| 14) Acknowledgement is made of a claim for dom  | nestic priority under 35 U.S.C. & 1                    | 19(e).  |  |  |  |  |  |
| Attachment(s)   |  |   |  |  |  |  |  |
| <ul> <li>14)  Notice of References Cited (PTO-892)</li> <li>15)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>16)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ul>                                       | 18) Notice of Inform                                   | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) |  |  |  |  |  |

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**DETAILED ACTION** 

Information Disclosure Statement

1. The information disclosure statement filed 07/21/2000 has been considered and made of

record by the examiner.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37

CFR 1.67(a) identifying this application by application number and filing date is required. See

MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration in a continuation-in-part

application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims

subject matter in addition to that disclosed in the prior copending application, acknowledges the

duty to disclose to the Office all information known to the person to be material to patentability

as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the

national or PCT international filing date of the continuation-in-part application.

Specification

3. The disclosure is objected to because of the following informalities: page 5, line 7, the

phrase "which is coupled to a first down converter" should be deleted. In addition, the U.S.

Patent Number of application 09/001,484 should be provided on page 1 line 5.

Appropriate correction is required.

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4. The disclosure is objected to because the continuation information on page 1 line 4-7 is in error. According to the continuation information on page 1 line 4-7, the present application is (i) a continuation of application 09/001,484 and (ii) continuation-in-part of application 08/394,234. Since the specification of the present application is **not identical** to that of application 09/001,484, the present application is **not** a continuation of application 09/001,484. Since the specification of the present application is **identical** to that of application 08/394,234 (see applicant's preliminary amendment filed 07/26/2000, page 13), the present application is **not** a continuation-in-part of application 08/394,234.

Since the continuation information is not correct, the present application does not benefit the earlier filing dates of the prior applications.

Appropriate correction is required.

5. The amendment filed 07/26/2000 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the words "other "sources" on page 6 line 20.

Applicant is required to cancel the new matter in the reply to this Office Action.

**Drawings** 

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6. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 07/21/2000 have been approved.

The formal drawing filed on 07/21/2000 is acceptable.

## Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 8. Claims 22-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 5,805,975. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-6 of U.S. Patent No. 5,805,975 encompass claims 22-32 of the present application.
- 9. Claims 22-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,122,482. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-39 of U.S. Patent No. 6,122,482 encompass claims 22-32 of the present application.

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## Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
- 12. Claims 22-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uemura (Japanese Publication No. 2-140022).

As to claims 22, 24, 26, 31, Uemura discloses in figure 1 a satellite broadcasting system receiving vertical polarized signal and horizontal polarized signal at satellite antenna 1, frequency converting at frequency converter (see numerals 3-4), simultaneously applying frequency-converted signals to a cable (see the transmission line 13), recovering the frequency-converted signals at reception system R (see figure 1), further frequency converting the signals

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at frequency converter 43 (see figure 3), and switching between vertical polarized signal and horizontal polarized signal by a channel setting section 48a (see pages 13-15). Uemura thus discloses all the claimed limitations except for the cable 13 being a coaxial cable. The examiner, however, takes Official Notice that such a coaxial cable is known in the art for having a larger bandwidth. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the cable 13 in Uemura with the conventional coaxial cable, in order to achieve more bandwidth.

As to claims 23, 25, as discussed above Uemura does disclose switching between vertical polarized signal and horizontal polarized signal by a channel setting section 48a (see pages 13-15). Uemura, however, fails to disclose the above switching function is done by an electrical switch as claimed. The examiner, however, takes Official Notice that using an electrical switch to perform switching function is known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above conventional teaching of the electrical switch to Uemura, in order to have a simple and low-cost way of switching the vertical and horizontal signals.

As to claim 27, Uemura discloses "a wire" as claimed (see the connection between satellite receiver 16 and TV receiver 17).

As to claim 28, Uemura discloses a down conversion (see page 6).

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As to claims 29-30, as discussed above Uemura does disclose frequency-converting the received satellite signals, then transmitting the frequency-converted signals via a single coaxial cable 13 to a TV receiver 17. Uemura, however, fails to disclose that the above frequency-converting is done by an up conversion as in claim 29, or a down conversion followed by an up conversion as in claim 30. The examiner, however, believes that as long as both Uemura and the claimed invention disclose frequency-converting the received satellite signals, transmitting the frequency-converted signals via a single coaxial cable to a TV receiver, the fact that how the received satellite signals are frequency-converted would not render the claims patentable over Uemura. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Uemura as claimed, in order to have flexible ways of frequency-converting the received satellite signals.

As to claim 32, first of all the rejection to claim 22 over Uemura as set forth above is herein incorporated by reference. Uemura discloses all the claimed limitations except for (i) the converter 3-4 being a low noise converter and (ii) head-out processor (see block 48 in figure 3) being coupled to the satellite receiver (Uemura instead discloses the head-out processor being located within the satellite receiver 16). The examiner, however, takes Official Notice that such a low noise converter is known in the art for the purpose of improving the noise figure. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the converter 3-4 in Uemura with the conventional low noise converter

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and locate the head-out processor outside the satellite receiver, in order to improve the noise figure and reduce the cost and weight of the satellite receiver.

## Conclusion

14. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications intended for entry)

Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Vo, whose telephone number is (703) 308-6728. The Examiner can normally be reached on Tuesday-Friday from 8:00 AM - 5:30 PM. The examiner can also be reached on alternate Monday.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Nguyen Vo

March 10, 2001

NGUYENT.VO PRIMARY EXAMINER